

Ochsner (A. J.)

al

LIBRARY  
SURGEON GENERAL'S OFFICE

JUN. 23-1899

634.

## DEMONSTRATION OF ACTINOMYCES.

FRESH SPECIMENS TAKEN FROM A PATIENT AT PRESENT IN THE  
AUGUSTANA HOSPITAL.

· BY DR. A. J. OCHSNER, CHICAGO.

My object in demonstrating these specimens to-night is to give you an opportunity of seeing the actinomyces before their appearance has been changed by the various reagents employed in their preservation.

The patient, a farmer, 23 years of age, was referred to me by his physician, Dr. Crawford, from Miles, Iowa, with the probable diagnosis of actinomycosis. He gave the following history: His health had always been good until six months ago when he noticed a stiffness of the right side of his face and neck. He attributed this to an irritation arising from a wisdom tooth which had annoyed him for some time. The tooth and the molar in front of it were extracted but the condition was not improved.

Two months ago an abscess was formed opposite the angle of the jaw; this was opened and treated antiseptically. For a few weeks the swelling subsided but the improvement was only temporary.

During the past months the induration has increased to a marked extent. At the present time the swelling extends from the external angle of the eye to the clavicle, covering nearly the entire cheek and the right side of the neck. The tissues are red and indurated and at a point opposite the coronoid process of the lower jaw there is an abscess containing half an ounce of pus. At this point the original abscess was opened two months ago. The motion of the jaw is very much impaired. The patient still suffers pain but not to such an extent as before the first abscess was opened.

Chicago Medical Society, Aug., 1893.

*presented by the author*

I laid open the tissues by means of a free incision extending throughout the indurated tissue, curetted away all of the diseased tissue, irrigated thoroughly with a strong aqueous solution of tincture of iodine, powdered the entire surface with iodoform and packed the wound with iodoform gauze. The side of the face and neck was then covered with an enormous moist 3 per cent carbolic acid dressing which is to be renewed daily. Concerning the original source of infection I have been able to secure the following facts:

Two years ago the patient fed and cared for two cows suffering from lumpy jaw. He was not especially careful because he did not know that infection is possible. At this time he was cutting a wisdom tooth which gave him much annoyance but he did not suspect any further trouble.

These two cows and many others suffering from the same disease were sold to the village butcher, who killed them and sold the meat to the people in the village and surrounding country.

During the winter other cows from the same herd were killed by the farmer, and the patient suggests that they might have suffered from actinomycosis in other portions of the body and that his infection might have occurred from eating the meat of these animals. At times he partook of raw smoked sausages.

Two months before the patient first noticed his disease, he was present while one of his neighbors butchered a cow suffering from lumpy jaw. It is plain from these facts that the patient had ample opportunity for becoming infected.

About seven years ago I reported my first case of actinomycosis to this society. The disease affected the antrum of Highmore primarily and the left lung secondarily.

Free evacuation and antiseptic after-treatment disposed of the disease in the antrum, but it progressed in the lung, destroying the patient's life about two years later: The patient found great relief in changing his residence from Indiana to Texas.

My second patient, whose case I reported to this society nearly three years ago, suffered from extensive actinomycosis of the face and neck, originating in the lower jaw. I treated him in the manner described in the case under consideration to-day. He recovered fully and is still perfectly well. In the present case I intend to administer increasing doses of iodide of potash in connection with the local antiseptic treatment.

The specimens under the microscope show characteristic "ray fungi," consisting of delicate club-shaped structures arranged in the form of rosettes. They were prepared for examination by



placing some of the little yellow structures found in the diseased tissue upon a microscopic slide in a drop of water and covering it with a cover glass. Fresh specimens prepared in this simple manner are much more satisfactory than those which have been carefully stained and mounted.

I also wish to demonstrate the diseased tissue in its gross appearance. You notice upon these pieces of yellowish tissue, which were obtained by means of a sharp curette, many small spherules having the appearance of mustard seeds.

These are the characteristic granules always present in tissues infected with actinomyces.

In pus derived from abscesses, which usually occur in actinomycosis, these granules are frequently the only means of making a correct diagnosis.

These cases teach us that actinomycosis in animals should be recognized as a dangerous disease, especially to those who come in contact with the diseased animals. Farmers especially should be made familiar with this fact, because they could easily avoid an infection. None of my patients suspected in the least that they were in danger of becoming infected.

710 SEDGWICK STREET.

